AMENDMENT TO THE SUBSTITUTE SPECIFICATION

Please replace the first full paragraph on page 3 with the following amended paragraph.

A method or device described by German Patent Reference DE 102 18 574 A1 for measuring blood pressure is also designed for detecting arrhythmia, wherein pulse wave information, such as the width, height and a time interval is detected for a plurality of beats. However, with a lack of circulatory rest, the blood pressure values per se cannot ~~not~~ be sufficiently accurately measured.

Please replace the third paragraph on page 11 with the following amended paragraph.

Following a physical or ~~psychic~~ psychological stress, the organism requires a transition time T_T until circulatory rest again prevails. The transition time T_T depends on a number of factors, in particular extent and type of the stress, age, sex, training state, and/or previous illness.

Please replace the first paragraph on page 16 with the following amended paragraph.

A further statement regarding the presence of hemodynamic stability can be obtained by the evaluation of the pulse amplitudes, which are marked by the envelope of the pulse oscillogram PO and represented for different cases in Figs. 4A and 4B. A theoretical envelope of a pulse oscillogram PO in an initial time period $T_{initial}$ is represented by way of example in Fig. 4A by a solid line. A dashed line shows the progression of the envelope at a later time period $T_{terminal}$. The different envelopes are part of statistical circulation conditions and show as characteristic values, for example, an ascending angle [[α, α']] α", α' and a descending angle [[β, β']] β",β', and/or relative plateau areas PL', PL".

Please replace the last paragraph on page 17 with the following amended paragraph.

Further assessment criteria for hemodynamic stability result from a pulse or curve shape analysis by distinguishing characteristics which show, for example in accordance with Fig. 4C, a pulse curve progression p(t) over the time t. During this the changes of steepness of ascending and/or descending pulse flanks during the measurement are for example determined. In the ascending pulse flank the rise is determined for a point [[xi]] $\underline{\xi}$ $(A_{max} - A_{min}) + A_{min})$, wherein A_{max} is the maximum and A_{min} the minimum of the respective amplitude, and [[xi]] $\underline{\xi}$ represents a value between zero and one, and the rise is expressed by the angle theta. In the descending pulse flank the rises for the points [[Δ_1]] $\underline{\delta}_1$ $(A_{max} - A_{min}) + A_{min}$, as well as ~~delta~~$_2$ $\underline{\delta}_2$ $(A_{max}$ - [[-]] $A_{min}) + A_{min}$ are calculated, wherein [[Δ_1]] $\underline{\delta}_1$ and [[Δ_2]] $\underline{\delta}_2$ are also values between zero and one and the rises are expressed by the angles [[ny_1]] $\underline{\gamma}_1$ and [[ny_2]] $\underline{\gamma}_2$. Now hemodynamic changes can be detected by chronological changes of the rises theta,[[ny_1]] $\underline{\gamma}_1$ and [[ny_2]] $\underline{\gamma}_2$, so that the drawing of conclusions regarding the hemodynamic stability is possible. In particular, the relationships of [[ny_1/theta]] $\underline{\gamma_1/\theta}$, as well as [[$ny_2$/theta]] $\underline{\gamma_2/\theta}$, are of diagnostic interest.

Please replace the last paragraph on page 18 with the following amended paragraph.

In accordance with Fig. 5, starting with the pulse oscillogram PO obtained in the measuring stage 1, the pulse period sequence analysis 2, the pulse amplitude progression analysis 3 and the pulse shape analysis 6 are performed in parallel, and ~~both~~ results are calculated together in a linkage stage 4, in order to form assessment criteria in an assessment stage 5 whether or not hemodynamic stability prevails. Depending on the characteristic markedness of the pulse period sequence analysis 2, the pulse amplitude progression analysis 3 and/or the pulse shape analysis 6, different weightings $kappa_1$, $kappa_2$, $kappa_3$ of these analyses can be performed prior to or during the linkage stage 4 or in the assessment stage 5 for forming the assessment criteria wherein, for example, also a combination of only two of these analyses, or the values of the statements obtained from them, can be linked with each other. The result as to whether or not hemodynamic stability exists is then used for the optical and/or acoustic display, or the automatic performance of a repeat measurement wherein, in case of non-existent hemodynamic stability, an appropriate warning display or indication of the blood pressure values takes place. An embodiment of the

blood pressure measuring method or the device can be realized in which the result of the hemodynamic stability analysis is used for correcting the blood pressure values.